

CLAIMS

What is claimed is:

1. A method for managing a distributed data processing
5 system, the method comprising:
 dynamically discovering endpoints within the
distributed data processing system;
 determining that a first discovered endpoint
communicates with a second discovered endpoint;
10 monitoring a status of the first discovered
endpoint;
 updating a status indicator for the first discovered
endpoint; and
 updating a status indicator for the second
15 discovered endpoint based on a communication history
between the first discovered endpoint and the second
discovered endpoint.
2. The method of claim 1 further comprising:
20 retrieving an SNMP table from the first discovered
endpoint;
 searching the SNMP table for an address associated
with the second discovered endpoint; and
 associating the first discovered endpoint with the
25 second discovered endpoint in response to finding the
address associated with the second discovered endpoint in
the SNMP table.

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3. A method for managing a distributed data processing system, the method comprising:

configuring monitoring parameters for network interface cards within the distributed data processing system using a network management framework;
dynamically discovering a set of discovered endpoints within the distributed data processing system;
designating a plurality of discovered endpoints as mission critical endpoints; and

associating a mission critical twin endpoint with each mission critical endpoint, wherein a mission critical twin endpoint is a discovered endpoint that has a communication history with a mission critical endpoint with which the mission critical twin endpoint is being associated.

4. The method of claim 3 further comprising:
retrieving an SNMP table from a discovered endpoint;
searching the SNMP table for an address associated with a mission critical endpoint; and
associating the discovered endpoint with the mission critical endpoint in response to finding the address associated with the mission critical endpoint in the SNMP table.

5. The method of claim 3 further comprising:
choosing mission critical twin endpoints from a subset of discovered endpoints which have not been previously specified as twin endpoints.

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6. The method of claim 5 further comprising:

selecting an endpoint in the subset of discovered endpoints that has a most significant communication history with a particular mission critical endpoint; and

5 creating a mission critical twin association between the selected endpoint and the particular mission critical endpoint in response to a determination of the most significant communication history.

10 7. The method of claim 6 further comprising:

retrieving an SNMP table from a discovered endpoint in the subset of discovered endpoints;

searching the SNMP table for an address associated with the particular mission critical endpoint;

15 in response to finding the address associated with the particular mission critical endpoint in the SNMP table, obtaining a value from the SNMP table to be compared with values obtained from other retrieved SNMP tables; and

20 determining the most significant communication history based on a comparison of the values obtained from the retrieved SNMP tables.

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8. An apparatus for managing a distributed data processing system, the apparatus comprising:

discovering means for dynamically discovering endpoints within the distributed data processing system;

5 determining means for determining that a first discovered endpoint communicates with a second discovered endpoint;

monitoring means for monitoring a status of the first discovered endpoint;

10 first updating means for updating a status indicator for the first discovered endpoint; and

second updating means for updating a status indicator for the second discovered endpoint based on a communication history between the first discovered
15 endpoint and the second discovered endpoint.

9. The apparatus of claim 8 further comprising:

retrieving means for retrieving an SNMP table from the first discovered endpoint;

20 searching means for searching the SNMP table for an address associated with the second discovered endpoint; and

associating means for associating the first discovered endpoint with the second discovered endpoint
25 in response to finding the address associated with the second discovered endpoint in the SNMP table.

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10. A apparatus for managing a distributed data processing system, the apparatus comprising:

configuring means for configuring monitoring parameters for network interface cards within the distributed data processing system using a network management framework;

discovering means for dynamically discovering a set of discovered endpoints within the distributed data processing system;

designating means for designating a plurality of discovered endpoints as mission critical endpoints; and

first associating means for associating a mission critical twin endpoint with each mission critical endpoint, wherein a mission critical twin endpoint is a discovered endpoint that has a communication history with a mission critical endpoint with which the mission critical twin endpoint is being associated.

11. The apparatus of claim 10 further comprising:

first retrieving means for retrieving an SNMP table from a discovered endpoint;

first searching means for searching the SNMP table for an address associated with a mission critical endpoint; and

second associating means for associating the discovered endpoint with the mission critical endpoint in response to finding the address associated with the mission critical endpoint in the SNMP table.

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12. The apparatus of claim 10 further comprising:

first choosing means for choosing mission critical
twin endpoints from a subset of discovered endpoints
which have not been previously specified as twin
5 endpoints.

13. The apparatus of claim 12 further comprising:

first selecting means for selecting an endpoint in
the subset of discovered endpoints that has a most
10 significant communication history with a particular
mission critical endpoint; and

first creating means for creating a mission critical
twin association between the selected endpoint and the
particular mission critical endpoint in response to a
15 determination of the most significant communication
history.

14. The apparatus of claim 13 further comprising:

second retrieving means for retrieving an SNMP table
20 from a discovered endpoint in the subset of discovered
endpoints;

second searching means for searching the SNMP table
for an address associated with the particular mission
critical endpoint;

25 first obtaining means for obtaining, in response to
finding the address associated with the particular
mission critical endpoint in the SNMP table, a value from
the SNMP table to be compared with values obtained from
other retrieved SNMP tables; and

30 determining means for determining the most
significant communication history based on a comparison
of the values obtained from the retrieved SNMP tables.

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15. A computer program product in a computer readable medium for use in a distributed data processing system for managing the distributed data processing system, the computer program product comprising:

- 5 instructions for dynamically discovering endpoints within the distributed data processing system;
- instructions for determining that a first discovered endpoint communicates with a second discovered endpoint;
- instructions for monitoring a status of the first
10 discovered endpoint;
- instructions for updating a status indicator for the first discovered endpoint; and
- instructions for updating a status indicator for the
15 second discovered endpoint based on a communication history between the first discovered endpoint and the second discovered endpoint.

16. The computer program product of claim 15 further comprising:

- 20 instructions for retrieving an SNMP table from the first discovered endpoint;
- instructions for searching the SNMP table for an address associated with the second discovered endpoint; and
- 25 instructions for associating the first discovered endpoint with the second discovered endpoint in response to finding the address associated with the second discovered endpoint in the SNMP table.

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17. A computer program product in a computer readable medium for use in a distributed data processing system for managing the distributed data processing system, the computer program product comprising:

- 5 instructions for configuring monitoring parameters for network interface cards within the distributed data processing system using a network management framework;
- instructions for dynamically discovering a set of discovered endpoints within the distributed data
- 10 processing system;
- instructions for designating a plurality of discovered endpoints as mission critical endpoints; and
- instructions for associating a mission critical twin endpoint with each mission critical endpoint, wherein a
- 15 mission critical twin endpoint is a discovered endpoint that has a communication history with a mission critical endpoint with which the mission critical twin endpoint is being associated.
- 20 18. The computer program product of claim 17 further comprising:
- instructions for retrieving an SNMP table from a discovered endpoint;
- instructions for searching the SNMP table for an
- 25 address associated with a mission critical endpoint; and
- instructions for associating the discovered endpoint with the mission critical endpoint in response to finding the address associated with the mission critical endpoint in the SNMP table.

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program product of claim 17 further

choosing mission critical twin
of discovered endpoints which
specified as twin endpoints.

am product of claim 19 further

for selecting an endpoint in the subset
endpoints that has a most significant
history with a particular mission critical

20. and

instructions for creating a mission critical twin
relation between the selected endpoint and the
particular mission critical endpoint in response to a
termination of the most significant communication
history.

21. The computer program product of claim 20 further
comprising:

instructions for retrieving an SNMP table from a
discovered endpoint in the subset of discovered
endpoints;

instructions for searching the SNMP table for an
address associated with the particular mission critical
endpoint;

instructions for obtaining, in response to finding
the address associated with the particular mission
critical endpoint in the SNMP table, a value from the
SNMP table to be compared with values obtained from other
retrieved SNMP tables; and

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15. A computer program product in a computer readable medium for use in a distributed data processing system for managing the distributed data processing system, the computer program product comprising:

- 5 instructions for dynamically discovering endpoints within the distributed data processing system;
- instructions for determining that a first discovered endpoint communicates with a second discovered endpoint;
- instructions for monitoring a status of the first
10 discovered endpoint;
- instructions for updating a status indicator for the first discovered endpoint; and
- instructions for updating a status indicator for the
15 second discovered endpoint based on a communication history between the first discovered endpoint and the second discovered endpoint.

16. The computer program product of claim 15 further comprising:

- 20 instructions for retrieving an SNMP table from the first discovered endpoint;
- instructions for searching the SNMP table for an address associated with the second discovered endpoint; and
- 25 instructions for associating the first discovered endpoint with the second discovered endpoint in response to finding the address associated with the second discovered endpoint in the SNMP table.

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17. A computer program product in a computer readable medium for use in a distributed data processing system for managing the distributed data processing system, the computer program product comprising:

- 5 instructions for configuring monitoring parameters for network interface cards within the distributed data processing system using a network management framework;
- instructions for dynamically discovering a set of discovered endpoints within the distributed data
- 10 processing system;
- instructions for designating a plurality of discovered endpoints as mission critical endpoints; and
- instructions for associating a mission critical twin endpoint with each mission critical endpoint, wherein a
- 15 mission critical twin endpoint is a discovered endpoint that has a communication history with a mission critical endpoint with which the mission critical twin endpoint is being associated.
- 20 18. The computer program product of claim 17 further comprising:
- instructions for retrieving an SNMP table from a discovered endpoint;
- instructions for searching the SNMP table for an
- 25 address associated with a mission critical endpoint; and
- instructions for associating the discovered endpoint with the mission critical endpoint in response to finding the address associated with the mission critical endpoint in the SNMP table.

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19. The computer program product of claim 17 further comprising:

instructions for choosing mission critical twin endpoints from a subset of discovered endpoints which
5 have not been previously specified as twin endpoints.

20. The computer program product of claim 19 further comprising:

instructions for selecting an endpoint in the subset
10 of discovered endpoints that has a most significant communication history with a particular mission critical endpoint; and

instructions for creating a mission critical twin association between the selected endpoint and the
15 particular mission critical endpoint in response to a determination of the most significant communication history.

21. The computer program product of claim 20 further comprising:

instructions for retrieving an SNMP table from a discovered endpoint in the subset of discovered endpoints;

instructions for searching the SNMP table for an
25 address associated with the particular mission critical endpoint;

instructions for obtaining, in response to finding the address associated with the particular mission critical endpoint in the SNMP table, a value from the
30 SNMP table to be compared with values obtained from other retrieved SNMP tables; and

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instructions for determining the most significant communication history based on a comparison of the values obtained from the retrieved SNMP tables.